

**AMENDMENTS TO THE CLAIMS**

**1-29. (Cancelled)**

**30. (Currently Amended)** A method for treating Alzheimer's disease, comprising administering an adeno-associated virus vector in a therapeutically effective amount to a subject ~~whereby to suppress a formation of an amyloid plaque in a central nervous system and reduce a~~ the concentration of TGF- $\beta$  in ~~the~~ blood of the subject ~~is reduced~~, wherein the adeno-associated virus vector comprises DNA encoding a  $\beta$ -amyloid peptide and DNA encoding a signal peptide capable of extracellularly secreting said  $\beta$ -amyloid peptide, in an operative form.

**31. (Previously Presented)** The method according to claim 30, wherein the  $\beta$ -amyloid peptide is expressed in intestinal cells by the adeno-associated virus vector.

**32. (Previously Presented)** The method according to claim 30, wherein said  $\beta$ -amyloid peptide comprises the amino acids 4 to 10 of the amino acid sequence as shown in SEQ ID NO: 2.

**33. (Previously Presented)** The method according to claim 30, wherein the DNA encoding said  $\beta$ -amyloid peptide comprises the nucleotides 10 to 30 of the nucleotide sequence as shown in SEQ ID NO: 1.

**34. (Withdrawn)** The method according to claim 30, wherein said  $\beta$ -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 2.

**35. (Withdrawn)** The method according to claim 30, wherein the DNA encoding said  $\beta$ -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 1.

**36. (Withdrawn)** The method according to claim 30, wherein said  $\beta$ -amyloid peptide comprises the amino acid sequence as shown in SEQ ID NO: 4.

- 37. (Withdrawn)** The method according to claim 30, wherein the DNA encoding said  $\beta$ -amyloid peptide comprises the nucleotide sequence as shown in SEQ ID NO: 3.
- 38. (Previously Presented)** The method according to claim 30, wherein said signal peptide is a signal peptide of amyloid precursor protein.
- 39. (Withdrawn)** The method according to claim 30, wherein said signal peptide comprises the amino acid sequence as shown in SEQ ID NO: 6.
- 40. (Withdrawn)** The method according to claim 30, wherein the DNA encoding said signal peptide comprises the nucleotide sequence as shown in SEQ ID NO: 5.
- 41. (Currently Amended)** The method according to claims 30, wherein said administering is orally administering.
- 42. (New)** The method according to claim 30, wherein progress of cerebrovascular amyloid deposition or microvascular degeneration is suppressed.
- 43. (New)** The method according to claim 30, wherein anti- $\beta$  amyloid peptide antibody production is induced without substantially inducing a cellular immune response.
- 44. (New)** The method according to claim 43, wherein the induced cellular immune response causes encephalitis.
- 45. (New)** The method according to claim 30, wherein administering said adeno-associated virus vector maintains therapeutic activity for at least 6 months.